# SPECIAL ADDENDUM

## Revision to OCTOBER 1990
## U.S. Imports of Machine Tools

The U.S. Bureau of the Census has notified us of two classification errors in the October 1990 monthly data:

1. Imports in October from Japan under code 8462910090 "Hydraulic Presses, non-NC" are shown as 975 units valued at $978,000. This should be changed to 9 units valued at $309,000 and "used and rebuilt" (code 9800000002) should be increased by 1 unit valued at $669,000.

2. Imports in October from Italy under code 8537100030 "Numerical controls for controlling machine tools" are shown as 15,003 units valued at $79,000. This should be changed to three units valued at $3,000.

The revisions were received too late for the detailed monthly and year-to-date import data to be corrected this month. However, the revisions will be reflected in the year-to-date totals next month.

The chart entitled "1990 U.S. Imports by Product Groups" does reflect the revisions.

AYL26-3

REPORT

NMTBA
The Association For Manufacturing Technology

Direct Dial: (703) 827-5260

# STATISTICAL

No. 01-91 January 2, 1991

## U.S. FOREIGN TRADE IN MANUFACTURING TECHNOLOGY – OCTOBER 1990

(Values in Millions of U.S. Dollars)

| | Oct. 1990 | Sept. 1990 | Average Jul-Sep | Year to Date '90 | Year to Date '89 | % Change YTD '89-'90 |
|---|---|---|---|---|---|---|
| **METAL CUTTING MACHINE TOOLS** | | | | | | |
| Exports | $ 52.0 | $ 52.3 | $ 48.9 | $ 505.9 | $ 403.7 | 25.3% |
| Imports | $162.3 | $137.6 | $173.6 | $1,526.6 | $1,574.5 | (3.0%) |
| Balance | ($110.3) | ($ 85.3) | ($124.7) | ($1,020.7) | ($1,170.8) | (12.8%) |
| **METAL FORMING MACHINE TOOLS** | | | | | | |
| Exports | $ 33.0 | $ 34.3 | $ 34.8 | $ 377.2 | $ 383.3 | (1.6%) |
| Imports | $ 47.2 | $ 42.9 | $ 48.6 | $ 424.9 | $ 462.1 | (8.1%) |
| Balance | ($ 14.2) | ($ 8.6) | ($ 13.8) | ($ 47.7) | ($ 78.8) | (39.5%) |
| **MACHINE TOOL TOTAL** | | | | | | |
| Exports | $ 84.9 | $ 86.5 | $ 83.7 | $ 883.0 | $ 787.0 | 12.2% |
| Imports | $209.5 | $180.5 | $222.2 | $1,951.4 | $2,036.6 | (4.2%) |
| Balance | ($124.6) | ($ 94.0) | ($138.5) | ($1,068.4) | ($1,249.6) | (14.5%) |
| **NUMERICALLY CONTROLLED MACHINE TOOLS** | | | | | | |
| Exports | $ 27.3 | $ 28.3 | $ 28.0 | $ 286.6 | $ 209.9 | 36.5% |
| Imports | $110.3 | $ 97.9 | $120.0 | $1,041.6 | $1,094.3 | (4.8%) |
| Balance | ($ 83.0) | ($ 69.6) | ($ 92.0) | ($ 755.0) | ($ 884.4) | (14.6%) |
| **OTHER MANUFACTURING TECHNOLOGY** | | | | | | |
| Exports | $160.4 | $149.3 | $145.6 | $1,517.7 | NA | NA |
| Imports | $165.2 | $140.4 | $159.4 | $1,630.7 | NA | NA |
| Balance | ($ 4.8) | $ 8.9 | ($ 13.8) | ($ 113.0) | NA | NA |

Note: Numerically controlled machine tools is a subgroup of the machine tool total. NA = not available; ( ) denotes negative. Individual items may not add up to totals due to rounding.

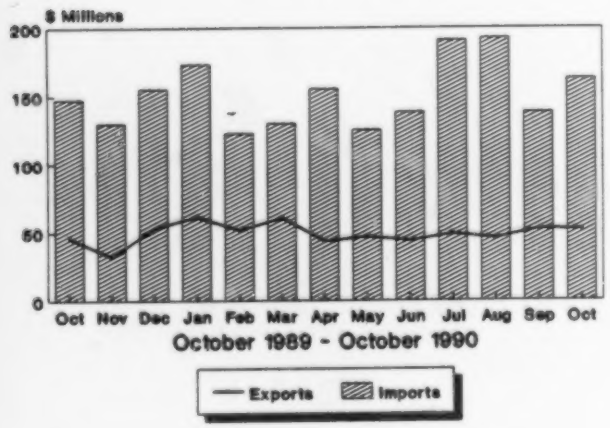
• Machine tool imports in October jumped to $209.5 million; for the fourth time this year (and the third time in the previous four months) imports exceeded $200 million.

• Year-to-date imports were down 4% from 1989; year-to-date imports of NC machines were down 5% from 1989.

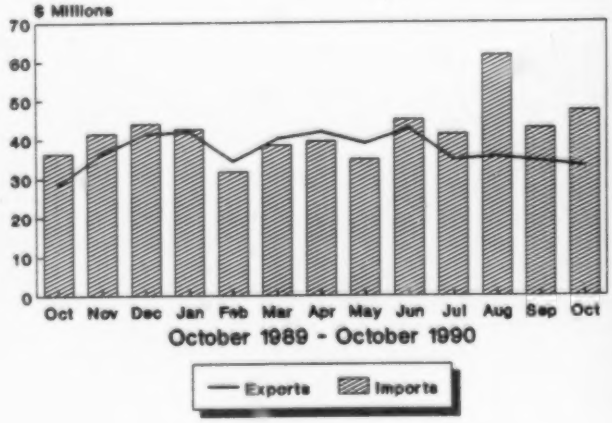
• Exports of machine tools fell 2% in October from September to $84.9 million. However, year-to-date exports were 12% higher than last year at this time. Year-to-date exports of NC machines were 37% higher than last year.

## U.S. MONTHLY TRADE IN MACHINE TOOLS

### METAL CUTTING




### METAL FORMING




## METAL CUTTING MACHINE TOOLS

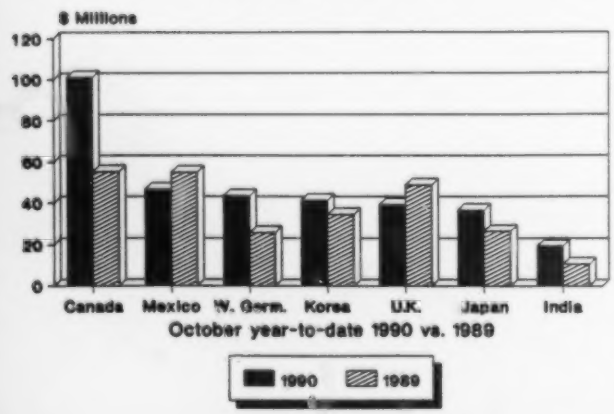
Exports

- Year-to-date exports of metal cutting machines were $505.9 million, up 25% over 1989. Year-to-date exports of machining centers were $49.3 million, up from $36.9 million at this time in 1989.

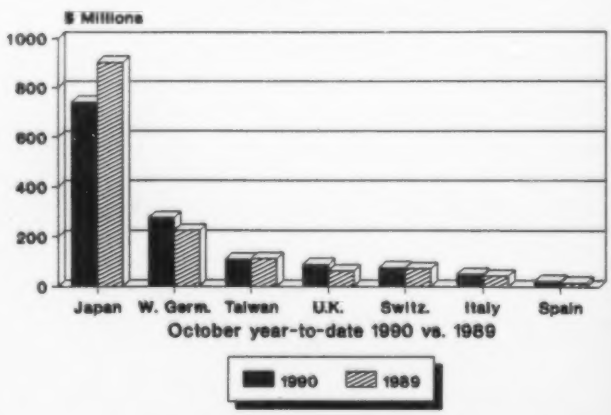
- U.S. metal cutting machine tool exports to Germany in October were $9.4 million, for a September-October total of $18.4 million. The total for January-August 1990: $25.2 million.

- Some small but growing markets for metal cutting machines: Malaysia ($2.3 million in 1990 through October vs. $1.0 million in 1989 at this time); Chile ($3.7 million vs. $1.4 million); South Africa ($2.9 million vs. $1.0 million); and Portugal ($1.2 million vs. $0.1 million).

### LEADING U.S. EXPORT MARKETS
METAL CUTTING MACHINES




### LEADING U.S. IMPORT SOURCES
METAL CUTTING MACHINES



Imports

• Metal cutting machine tool imports rose 18% in October to $137.6 million. Year-to-date imports were $1.5 billion, down 3% from 1989.

• Imports from Japan in October were $78.9 million, up slightly from September. Year-to-date imports from Japan were down 18% compared with 1989; imports from Taiwan were down 2%.

• In terms of value, year-to-date imports of gear cutting machines were up 34% in 1990 through October to $46.4 million. In unit terms, however, imports were down 28% to 433 units.

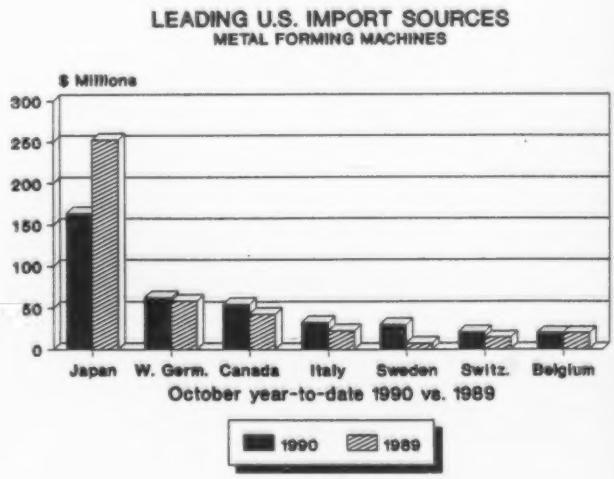
## METAL FORMING MACHINE TOOLS

Exports

• Metal forming exports in September were $33.0 million, the lowest monthly total since October 1989. Year-to-date exports of $377.2 million were down 2% from 1989.

• Small but growing markets for metal forming machines include Malaysia ($4.4 million so far in 1990, up from $1.5 million in 1989); Austria ($2.3 million vs. $0.7 million); Portugal ($2.5 million vs. $0.6 million); and Greece ($4.8 million vs. $1.4 million.)

• Year-to-date 1990 exports of forging machines were down 52% in unit terms (317 machines vs. 655 machines) compared with 1989 but up 31% in value terms ($40.8 million vs. $31.2 million).




Imports

• Year-to-date imports of metal forming machines were $424.9 million in 1990 through October, down 8% from 1989. Imports from Sweden reached $29.6 million so far in 1990, up 321% from 1990.

• Year-to-date imports of punching and shearing machines were down 7% in unit terms and down 2% in value terms. Imports of bending and forming machines were down 14% in unit terms but up 2% in value terms.

## OTHER MANUFACTURING TECHNOLOGY

### Exports

• U.S. exports of other manufacturing technology rose in October to $160.4 million from $149.3 million in September. The average for 1990: $151.8 million.

• Year-to-date exports of machine tool parts and accessories were $596.3 million, down from $598.8 million in 1989 at this time.

• Year-to-date exports of industrial robots were $53.4 million, up from $38.8 million in 1989. The primary markets so far in 1990: Canada ($28.4 million), Germany ($9.4 million), and France ($3.3 million.)

### Imports

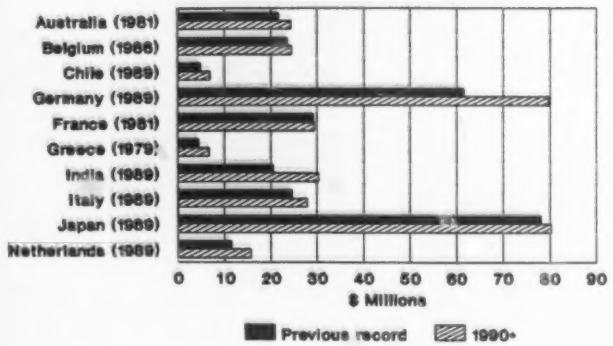
• Year-to-date imports of injection molding machinery were $253.2 million in 1990 through October, down from $295.3 million at the same time in 1989.

• Imports of industrial robots in October were $13.4 million. The average for 1990 through October: $9.5 million.

## MONTHLY FOCUS

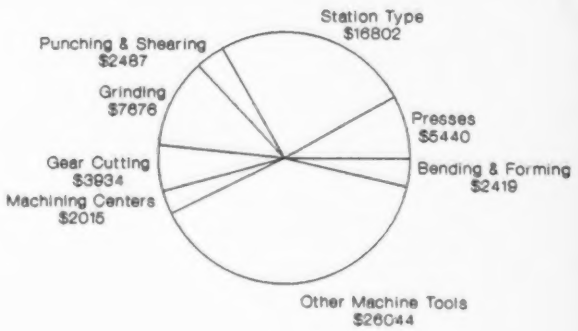
U.S. machine tool exports to Germany in 1990 through October totalled $66.8 million, which already exceeds the previous annual record of $61.6 million set last year. (Both figures include U.S. exports to what was East Germany.) U.S. exports to many other countries are on pace to exceed previous records. The first chart below compares estimated U.S. exports for 1990 (January-October annualized) for selected countries with the previous record high for that country. (The year the previous record was set is in parentheses after the country name.) The second chart breaks down U.S. exports to Germany so far in 1990 by type of machine.

**U.S. Machine Tool Exports**
**Selected Countries**
**Previous Record vs. 1990•**




• • January-October annualized

**U.S. Machine Tool Exports to Germany**
**By Type of Machine, January-October 1990**
**(Values in thousands of dollars)**




Total = $66.8 million

# 1990 EXPORTS

## METAL CUTTING

| COUNTRY | OCTOBER | SEPTEMBER | %CHANGE | OCT YTD'90 | OCT YTD'89 | %CHANGE |
|---|---|---|---|---|---|---|
| Canada | $ 8,009,551 | $ 8,820,209 | -9.19% | $101,088,818 | $55,151,307 | 83.29% |
| Mexico | 4,774,615 | 3,448,498 | 38.45 | 46,626,365 | 55,026,254 | -15.27 |
| West Germany | 9,360,107 | 8,985,424 | 4.17 | 43,572,695 | 25,765,205 | 69.11 |
| Korea | 2,470,923 | 4,955,401 | -50.14 | 41,415,583 | 34,558,262 | 19.84 |
| U.K. | 1,636,685 | 1,863,521 | -12.17 | 39,258,538 | 48,819,004 | -19.58 |
| Japan | 3,409,493 | 6,269,146 | -45.61 | 36,667,705 | 26,400,307 | 38.89 |
| India | 2,621,956 | 1,225,769 | 113.90 | 19,218,512 | 10,629,190 | 80.81 |
| Belgium | 672,276 | 723,105 | -7.03 | 17,859,291 | 6,289,180 | 183.97 |
| China | 2,107,884 | 1,400,090 | 50.55 | 17,660,681 | 23,950,949 | -26.26 |
| Italy | 2,159,265 | 719,809 | 199.98 | 15,362,054 | 11,768,594 | 30.53 |
| Australia | 208,074 | 547,544 | -62.00 | 14,199,046 | 8,632,504 | 64.48 |
| Brazil | 2,432,266 | 983,665 | 147.27 | 13,880,566 | 9,132,011 | 52.00 |
| Taiwan | 638,581 | 744,257 | -14.20 | 10,129,359 | 7,719,779 | 31.21 |
| France | 982,580 | 866,101 | 13.45 | 8,099,748 | 10,537,720 | -23.14 |
| USSR | 1,456,509 | 2,697,820 | -46.01 | 7,861,503 | 8,975,415 | -12.41 |
| Singapore | 203,753 | 1,383,615 | -85.27 | 7,663,635 | 7,181,146 | 6.72 |
| Venezuela | 763,086 | 997,211 | -23.48 | 6,462,321 | 5,408,868 | 19.48 |
| Netherlands | 1,460,486 | 189,199 | 671.93 | 5,700,502 | 3,559,887 | 60.13 |
| Spain | 357,536 | 743,250 | -51.90 | 5,561,028 | 2,997,275 | 85.54 |
| Switzerland | 189,334 | 71,193 | 165.94 | 4,766,425 | 3,339,228 | 42.74 |
| Malaysia | 3,974 | 122,661 | -96.76 | 2,277,314 | 990,120 | 130.00 |
| Thailand | 390,111 | 269,370 | 44.82 | 2,047,758 | 2,143,259 | -4.46 |
| Indonesia | 132,432 | 6,725 | 1,869.25 | 305,409 | 4,129,863 | -92.60 |
| Austria | 17,856 | 0 | NA | 244,613 | 1,253,499 | -80.49 |

## METAL FORMING

| COUNTRY | OCTOBER | SEPTEMBER | %CHANGE | OCT YTD'90 | OCT YTD'89 | %CHANGE |
|---|---|---|---|---|---|---|
| Canada | $ 5,993,872 | $ 6,624,036 | -9.51% | $ 58,432,886 | $36,559,038 | 59.83% |
| Mexico | 4,674,003 | 4,268,853 | 9.49 | 46,075,046 | 35,067,784 | 31.39 |
| U.K. | 1,712,686 | 2,455,806 | -30.26 | 31,406,046 | 35,884,018 | -12.48 |
| Japan | 1,823,012 | 2,263,121 | -19.45 | 30,226,669 | 39,831,966 | -24.11 |
| Korea | 1,248,488 | 729,642 | 71.11 | 29,007,336 | 52,353,396 | -44.59 |
| West Germany | 2,901,401 | 2,874,086 | 0.95 | 22,885,712 | 22,196,408 | 3.11 |
| France | 3,898,667 | 728,851 | 434.91 | 16,432,765 | 7,447,424 | 120.65 |
| Taiwan | 2,170,263 | 1,324,220 | 63.89 | 13,664,036 | 17,293,017 | -20.99 |
| China | 118,924 | 938,263 | -87.33 | 12,433,466 | 10,092,651 | 23.19 |
| Italy | 583,583 | 631,394 | -7.57 | 7,859,668 | 7,218,406 | 8.88 |
| Netherlands | 651,242 | 1,056,874 | -38.38 | 7,422,900 | 6,249,903 | 18.77 |
| Indonesia | 936,240 | 1,296,993 | -27.81 | 6,572,707 | 167,461 | 3,824.92 |
| India | 164,688 | 155,782 | 5.72 | 6,057,465 | 8,596,867 | -29.54 |
| Australia | 1,318,002 | 798,437 | 65.07 | 6,[illegible]1,618 | 6,290,285 | -4.11 |
| Brazil | 475,104 | 393,830 | 20.64 | 5[illegible]1,475 | 6,537,473 | -8.66 |
| Spain | 332,733 | 522,896 | -36.37 | 5,495,561 | 3,768,141 | 45.84 |
| Singapore | 485,028 | 558,499 | -13.16 | 5,323,021 | 7,062,393 | -24.63 |
| Malaysia | 36,499 | 306,262 | -88.08 | 4,380,532 | 1,497,528 | 192.52 |
| Thailand | 432,521 | 82,288 | 425.62 | 4,122,453 | 3,456,071 | 19.28 |
| Belgium | 37,930 | 227,979 | -83.36 | 2,576,928 | 2,389,073 | 7.86 |
| Austria | 145,196 | 55,156 | 163.25 | 2,309,218 | 681,490 | 238.85 |
| Switzerland | 160,001 | 201,015 | -20.40 | 2,048,537 | 1,336,853 | 53.24 |
| Venezuela | 133,293 | 390,369 | -65.85 | 1,551,657 | 7,834,948 | -80.20 |
| USSR | 37,846 | 0 | NA | 732,665 | 976,510 | -24.97 |

## TOTAL METAL CUTTING AND METAL FORMING

| COUNTRY | OCTOBER | SEPTEMBER | %CHANGE | OCT YTD'90 | OCT YTD'89 | %CHANGE |
|---|---|---|---|---|---|---|
| Canada | $14,003,423 | $15,444,245 | -9.33% | $159,521,704 | $91,710,345 | 73.94 |
| Mexico | 9,448,618 | 7,717,351 | 22.43 | 92,701,411 | 90,094,038 | 2.89 |
| U.K. | 3,349,371 | 4,319,327 | -22.46 | 70,664,584 | 84,703,022 | -16.57 |
| Korea | 3,719,411 | 5,685,043 | -34.58 | 70,422,919 | 86,911,658 | -18.97 |
| Japan | 5,232,505 | 8,532,267 | -38.67 | 66,894,374 | 66,232,273 | 1.00 |
| West Germany | 12,261,508 | 11,859,510 | 3.39 | 66,458,407 | 47,961,613 | 38.57 |
| China | 2,226,808 | 2,338,353 | -4.77 | 30,094,147 | 34,043,600 | -11.60 |
| India | 2,786,644 | 1,381,551 | 101.70 | 25,275,977 | 19,226,057 | 31.47 |
| France | 4,881,247 | 1,594,952 | 206.04 | 24,532,513 | 17,985,144 | 36.40 |
| Taiwan | 2,808,844 | 2,068,477 | 35.79 | 23,793,395 | 25,012,796 | -4.88 |
| Italy | 2,742,848 | 1,351,203 | 102.99 | 23,221,722 | 18,987,000 | 22.30 |
| Belgium | 710,206 | 951,084 | -25.33 | 20,436,219 | 8,678,253 | 135.49 |
| Australia | 1,526,076 | 1,345,981 | 13.38 | 20,230,664 | 14,922,789 | 35.57 |
| Brazil | 2,907,370 | 1,377,495 | 111.06 | 19,852,041 | 15,669,484 | 26.69 |
| Netherlands | 2,111,728 | 1,246,073 | 69.47 | 13,123,4[illegible]2 | 9,809,790 | 33.78 |
| Singapore | 688,781 | 1,942,114 | -64.53 | 12,986,656 | 14,243,539 | -8.82 |
| Spain | 690,269 | 1,266,146 | -45.48 | 11,056,589 | 6,765,416 | 63.43 |
| USSR | 1,494,355 | 2,697,820 | -44.61 | 8,594,168 | 9,951,925 | -13.64 |
| Venezuela | 896,379 | 1,387,580 | -35.40 | 8,013,978 | 13,243,816 | -39.49 |
| Indonesia | 1,068,672 | 1,303,718 | -18.03 | 6,878,116 | 4,297,324 | 60.06 |
| Switzerland | 349,335 | 272,208 | 28.33 | 6,814,962 | 4,676,081 | 45.74 |
| Malaysia | 40,473 | 428,923 | -90.56 | 6,657,846 | 2,487,648 | 167.64 |
| Thailand | 822,632 | 351,658 | 133.93 | 6,170,211 | 5,599,330 | 10.20 |
| Austria | 163,052 | 55,156 | 195.62 | 2,553,831 | 1,934,989 | 31.98 |

# 1990 IMPORTS

## METAL CUTTING

| COUNTRY | OCTOBER | SEPTEMBER | %CHANGE | OCT YTD'90 | OCT YTD'89 | %CHANGE |
|---|---|---|---|---|---|---|
| Japan | $78,925,103 | $76,786,328 | 2.79% | $741,148,285 | $ 901,849,661 | -17.82% |
| West Germany | 26,485,175 | 24,174,207 | 9.56 | 275,377,364 | 224,625,602 | 22.59 |
| Taiwan | 13,455,165 | 8,693,755 | 54.77 | 108,942,915 | 111,458,031 | -2.26 |
| U.K. | 13,247,088 | 5,883,753 | 125.15 | 88,197,338 | 63,337,947 | 39.25 |
| Switzerland | 6,689,540 | 6,220,985 | 7.53 | 75,328,515 | 71,965,311 | 4.67 |
| Italy | 5,472,770 | 2,630,744 | 108.03 | 49,596,329 | 43,181,219 | 14.86 |
| Spain | 1,448,355 | 575,155 | 151.82 | 22,142,865 | 15,697,302 | 41.06 |
| France | 1,117,947 | 411,970 | 171.37 | 21,534,053 | 18,891,931 | 13.99 |
| Canada | 2,209,783 | 1,313,765 | 68.20 | 18,737,822 | 17,110,238 | 9.51 |
| Singapore | 1,465,875 | 1,174,361 | 24.82 | 16,303,496 | 14,290,650 | 14.09 |
| Korea | 1,214,833 | 1,111,870 | 9.26 | 16,015,775 | 21,669,137 | -26.09 |
| Sweden | 2,066,473 | 927,290 | 122.85 | 14,230,935 | 10,879,218 | 30.81 |
| Brazil | 1,854,603 | 586,911 | 215.99 | 11,936,937 | 5,915,178 | 101.80 |
| Belgium | 32,761 | 393,197 | -91.67 | 1,658,675 | 4,512,154 | -63.24 |

## METAL FORMING

| COUNTRY | OCTOBER | SEPTEMBER | %CHANGE | OCT YTD'90 | OCT YTD'89 | %CHANGE |
|---|---|---|---|---|---|---|
| Japan | $18,328,796 | $18,556,702 | -1.23% | $163,648,436 | $ 252,667,813 | -35.23% |
| West Germany | 7,744,878 | 5,514,397 | 40.45 | 62,031,709 | 58,239,351 | 6.51 |
| Canada | 6,467,509 | 5,409,200 | 19.56 | 54,502,252 | 42,114,629 | 29.41 |
| Italy | 663,747 | 828,127 | -19.85 | 32,604,530 | 22,750,665 | 43.31 |
| Sweden | 6,171,465 | 5,552,986 | 11.14 | 29,562,800 | 7,019,016 | 321.18 |
| Switzerland | 2,608,965 | 1,871,888 | 39.38 | 20,760,975 | 14,226,925 | 45.93 |
| Belgium | 1,643,832 | 327,216 | 402.37 | 19,515,967 | 19,526,102 | -0.05 |
| U.K. | 1,546,029 | 1,320,038 | 17.12 | 12,711,659 | 12,496,062 | 1.73 |
| Taiwan | 332,877 | 654,271 | -49.12 | 8,168,472 | 7,345,382 | 11.21 |
| Spain | 258,240 | 191,671 | 34.73 | 3,529,150 | 2,415,601 | 46.10 |
| France | 131,974 | 289,083 | -54.35 | 3,239,064 | 1,481,934 | 118.57 |
| Korea | 0 | 1,391 | -100.00 | 515,738 | 328,799 | 56.86 |
| Brazil | 0 | 2,406 | -100.00 | 202,406 | 4,517,850 | -95.52 |
| Singapore | 0 | 62,380 | -100.00 | 132,580 | 819,834 | -83.83 |

## TOTAL METAL CUTTING AND METAL FORMING

| COUNTRY | OCTOBER | SEPTEMBER | %CHANGE | OCT YTD'90 | OCT YTD'89 | %CHANGE |
|---|---|---|---|---|---|---|
| Japan | $97,253,899 | $95,343,030 | 2.00% | $904,796,721 | $1,154,517,474 | -21.63% |
| West Germany | 34,230,053 | 29,688,604 | 15.30 | 337,409,073 | 282,864,953 | 19.28 |
| Taiwan | 13,788,042 | 9,348,026 | 47.50 | 117,111,387 | 118,803,413 | -1.42 |
| U.K. | 14,793,117 | 7,203,791 | 105.35 | 100,908,997 | 75,834,009 | 33.07 |
| Switzerland | 9,298,505 | 8,092,873 | 14.90 | 96,089,490 | 86,192,236 | 11.48 |
| Italy | 6,136,517 | 3,458,871 | 77.41 | 82,200,859 | 65,931,884 | 24.68 |
| Canada | 8,677,292 | 6,722,965 | 29.07 | 73,240,074 | 59,224,867 | 23.66 |
| Sweden | 8,237,938 | 6,480,276 | 27.12 | 43,793,735 | 17,898,234 | 144.68 |
| Spain | 1,706,595 | 766,826 | 122.55 | 25,672,015 | 18,112,903 | 41.73 |
| France | 1,249,921 | 701,053 | 78.29 | 24,773,117 | 20,373,865 | 21.59 |
| Belgium | 1,676,593 | 720,413 | 132.73 | 21,174,642 | 24,038,256 | -11.91 |
| Korea | 1,214,833 | 1,113,261 | 9.12 | 16,531,513 | 21,997,936 | -24.85 |
| Singapore | 1,465,875 | 1,236,741 | 18.53 | 16,436,076 | 15,110,484 | 8.77 |
| Brazil | 1,854,603 | 589,317 | 214.70 | 12,139,343 | 10,433,028 | 16.35 |

# 1990 U.S. EXPORTS
# BY PRODUCT GROUPS

| PRODUCT TYPES | JANUARY 1990 | | FEBRUARY 1990 | | MARCH 1990 | | APRIL 1990 | |
|---|---|---|---|---|---|---|---|---|
| | Units | Value | Units | Value | Units | Value | Units | Value |
| Used & Rebuilt & Under $2,500 | 2,899 | 12,224,015 | 4,543 | 10,935,156 | 5,847 | 11,979,000 | 4,803 | 14,929,198 |
| Boring Machines | 13 | 958,297 | 8 | 1,407,307 | 13 | 1,519,123 | 8 | 1,954,122 |
| Drilling Machines | 110 | 2,255,419 | 53 | 920,425 | 94 | 2,533,602 | 62 | 1,031,525 |
| Gear Cutting Machines | 41 | 5,554,867 | 19 | 3,700,605 | 17 | 3,507,653 | 4 | 342,956 |
| Grinding Machines | 271 | 15,211,730 | 228 | 10,470,138 | 459 | 12,592,065 | 306 | 10,686,858 |
| Horizontal Lathes NC | 43 | 4,863,833 | 35 | 5,062,164 | 35 | 2,648,406 | 39 | 5,237,685 |
| Vertical Lathes NC | 5 | 1,223,137 | 0 | 0 | 16 | 892,377 | 5 | 262,000 |
| Lathes Non-NC | 58 | 1,113,041 | 48 | 1,473,294 | 76 | 1,855,222 | 65 | 2,364,278 |
| Milling Machines | 48 | 3,596,641 | 29 | 3,228,995 | 75 | 5,272,375 | 32 | 3,018,604 |
| Machining Centers | 65 | 7,526,957 | 34 | 6,062,752 | 50 | 8,542,651 | 26 | 4,477,012 |
| Station Type Machines | 10 | 5,374,341 | 28 | 7,752,282 | 8 | 4,611,947 | 2 | 596,029 |
| Other Metal Cutting | 314 | 7,165,369 | 312 | 7,438,893 | 364 | 9,303,138 | 269 | 6,223,447 |
| Punching & Shearing Machines | 107 | 4,427,453 | 121 | 9,826,370 | 155 | 5,546,446 | 111 | 3,759,666 |
| Bending & Forming Machines | 137 | 5,902,352 | 125 | 3,466,071 | 128 | 5,372,091 | 177 | 6,400,347 |
| Presses | 259 | 11,682,624 | 130 | 6,795,010 | 273 | 10,390,057 | 191 | 11,017,558 |
| Forging Machines | 26 | 5,015,295 | 16 | 2,278,536 | 31 | 3,378,097 | 26 | 3,198,154 |
| Other Metal Forming | 265 | 8,974,698 | 264 | 5,154,346 | 312 | 10,516,058 | 203 | 9,968,707 |
| TOTAL | 4,671 | 103,070,069 | 5,993 | 85,972,344 | 7,953 | 100,460,308 | 6,329 | 85,468,146 |

| PRODUCT TYPES | MAY 1990 | | JUNE 1990 | | JULY 1990 | | AUGUST 1990 | |
|---|---|---|---|---|---|---|---|---|
| | Units | Value | Units | Value | Units | Value | Units | Value |
| Used & Rebuilt & Under $2,500 | 5,514 | 13,323,757 | 6,556 | 17,922,902 | 5,058 | 13,126,467 | 4,863 | 14,611,340 |
| Boring Machines | 23 | 2,694,052 | 28 | 725,470 | 16 | 3,194,775 | 8 | 1,024,328 |
| Drilling Machines | 141 | 1,391,074 | 120 | 1,137,000 | 61 | 1,735,259 | 98 | 1,658,877 |
| Gear Cutting Machines | 16 | 3,920,375 | 23 | 7,676,020 | 35 | 8,746,125 | 4 | 2,246,285 |
| Grinding Machines | 234 | 9,407,118 | 266 | 5,746,890 | 390 | 11,166,259 | 324 | 14,070,348 |
| Horizontal Lathes NC | 43 | 4,213,770 | 45 | 4,033,357 | 30 | 3,555,437 | 30 | 2,587,966 |
| Vertical Lathes NC | 4 | 245,844 | 1 | 63,000 | 5 | 276,808 | 12 | 4,857,652 |
| Lathes Non-NC | 60 | 1,105,382 | 85 | 1,435,017 | 65 | 899,416 | 62 | 1,664,183 |
| Milling Machines | 38 | 1,738,745 | 13 | 603,525 | 33 | 5,244,894 | 28 | 1,875,948 |
| Machining Centers | 23 | 4,666,577 | 39 | 6,176,997 | 24 | 2,387,041 | 16 | 2,320,834 |
| Station Type Machines | 2 | 2,487,300 | 0 | 0 | 1 | 245,000 | 0 | 0 |
| Other Metal Cutting | 484 | 5,316,601 | 378 | 6,376,676 | 267 | 4,712,434 | 232 | 5,861,015 |
| Punching & Shearing Machines | 162 | 6,578,641 | 178 | 7,923,077 | 143 | 5,170,365 | 79 | 2,249,460 |
| Bending & Forming Machines | 142 | 4,048,283 | 125 | 4,440,766 | 136 | 5,191,915 | 269 | 9,426,251 |
| Presses | 287 | 8,435,990 | 154 | 10,425,441 | 145 | 5,027,176 | 133 | 4,874,468 |
| Forging Machines | 67 | 6,501,594 | 40 | 3,738,610 | 42 | 5,222,953 | 27 | 5,550,253 |
| Other Metal Forming | 324 | 9,293,053 | 340 | 8,244,762 | 230 | 7,705,041 | 233 | 6,075,258 |
| TOTAL | 7,564 | 85,368,156 | 8,391 | 86,669,510 | 6,681 | 83,607,365 | 6,418 | 80,954,466 |

# 1990 U.S. EXPORTS
# BY PRODUCT GROUPS

| PRODUCT TYPES | SEPTEMBER 1990 Units | SEPTEMBER 1990 Value | OCTOBER 1990 Units | OCTOBER 1990 Value | OCT'90 Y-T-D TOTALS Units | OCT'90 Y-T-D TOTALS Value | OCTOBER 1989 Units | OCTOBER 1989 Value |
|---|---|---|---|---|---|---|---|---|
| Used & Rebuilt & Under $2,500 | 5,218 | 13,541,688 | 6,399 | 11,915,072 | 51,700 | 134,508,595 | 4,883 | 8,099,179 |
| Boring Machines | 13 | 892,848 | 12 | 613,537 | 142 | 14,983,859 | 4 | 274,938 |
| Drilling Machines | 72 | 2,247,262 | 60 | 937,232 | 871 | 15,847,675 | 338 | 2,562,057 |
| Gear Cutting Machines | 16 | 8,205,773 | 33 | 4,217,786 | 208 | 48,118,445 | 16 | 5,122,064 |
| Grinding Machines | 412 | 8,753,533 | 346 | 10,933,219 | 3,236 | 109,038,158 | 465 | 12,020,573 |
| Horizontal Lathes NC | 29 | 3,059,742 | 25 | 2,408,221 | 354 | 37,670,581 | 29 | 3,070,304 |
| Vertical Lathes NC | 5 | 2,322,630 | 9 | 1,621,356 | 62 | 11,764,804 | 2 | 360,933 |
| Lathes Non-NC | 51 | 1,033,985 | 61 | 1,218,831 | 631 | 14,162,649 | 39 | 961,735 |
| Milling Machines | 38 | 5,262,002 | 51 | 2,190,381 | 385 | 32,032,110 | 42 | 3,215,606 |
| Machining Centers | 13 | 2,443,148 | 52 | 4,679,669 | 342 | 49,283,638 | 48 | 2,579,397 |
| Station Type Machines | 5 | 5,650,047 | 8 | 8,910,384 | 64 | 35,627,330 | 6 | 5,512,170 |
| Other Metal Cutting | 288 | 5,325,005 | 490 | 7,249,997 | 3,398 | 64,972,575 | 245 | 4,983,895 |
| Punching & Shearing Machines | 56 | 3,258,296 | 111 | 4,695,896 | 1,223 | 53,435,670 | 54 | 2,888,326 |
| Bending & Forming Machines | 165 | 8,316,381 | 139 | 6,554,180 | 1,543 | 59,118,637 | 94 | 5,361,439 |
| Presses | 126 | 5,543,751 | 89 | 4,543,803 | 1,787 | 78,735,878 | 144 | 8,502,848 |
| Forging Machines | 12 | 2,088,733 | 30 | 3,804,635 | 317 | 40,776,860 | 52 | 1,933,851 |
| Other Metal Forming | 168 | 8,580,087 | 241 | 8,430,558 | 2,580 | 82,942,568 | 175 | 6,758,040 |
| TOTAL | 6,687 | 86,524,911 | 8,156 | 84,924,757 | 68,843 | 883,020,032 | 6,636 | 74,207,355 |

| PRODUCT TYPES | OCT'89 Y-T-D TOTALS Units | OCT'89 Y-T-D TOTALS Value | % CHANGE SEP 90' - OCT 90' Units | % CHANGE SEP 90' - OCT 90' Value | % CHANGE OCT 89' - OCT 90' Units | % CHANGE OCT 89' - OCT 90' Value | % CHANGE YTD 89' - YTD 90' Units | % CHANGE YTD 89' - YTD 90' Value |
|---|---|---|---|---|---|---|---|---|
| Used & Rebuilt & Under $2,500 | 49,101 | 119,156,597 | 22.63 | -12.01 | 31.05 | 47.11 | 5.29 | 12.88 |
| Boring Machines | 215 | 13,015,248 | -7.69 | -31.28 | 200.00 | 123.15 | -33.95 | 15.13 |
| Drilling Machines | 627 | 15,589,514 | -16.67 | -58.29 | -82.25 | -63.42 | 38.92 | 1.66 |
| Gear Cutting Machines | 208 | 33,359,128 | 106.25 | -48.60 | 106.25 | -17.65 | 0.00 | 44.24 |
| Grinding Machines | 3,333 | 110,416,992 | -16.02 | 24.90 | -25.59 | -9.05 | -2.91 | -1.25 |
| Horizontal Lathes NC | 212 | 23,381,130 | -13.79 | -21.29 | -13.79 | -21.56 | 66.98 | 61.12 |
| Vertical Lathes NC | 17 | 2,394,324 | 80.00 | -30.19 | 350.00 | 349.21 | 264.71 | 391.36 |
| Lathes Non-NC | 426 | 11,378,931 | 19.61 | 17.88 | 56.41 | 26.73 | 48.12 | 24.46 |
| Milling Machines | 488 | 26,073,183 | 34.21 | -58.37 | 21.43 | -31.88 | -21.11 | 22.85 |
| Machining Centers | 307 | 36,860,639 | 300.00 | 91.54 | 8.33 | 81.42 | 11.40 | 33.70 |
| Station Type Machines | 50 | 23,956,411 | 60.00 | 57.70 | 33.33 | 61.65 | 28.00 | 48.72 |
| Other Metal Cutting | 2,040 | 49,791,389 | 70.14 | 36.15 | 100.00 | 45.47 | 66.57 | 30.49 |
| Punching & Shearing Machines | 998 | 48,523,950 | 98.21 | 44.12 | 105.56 | 62.58 | 22.55 | 10.12 |
| Bending & Forming Machines | 873 | 42,048,533 | -15.76 | -21.19 | 47.87 | 22.25 | 76.75 | 40.60 |
| Presses | 1,280 | 68,502,430 | -29.37 | -18.04 | -38.19 | -46.56 | 39.61 | 14.94 |
| Forging Machines | 655 | 31,160,175 | 150.00 | 82.15 | -42.31 | 96.74 | -51.60 | 30.86 |
| Other Metal Forming | 3,355 | 131,363,164 | 43.45 | -1.74 | 37.71 | 24.75 | -23.10 | -36.86 |
| TOTAL | 64,185 | 786,971,738 | 21.97 | -1.85 | 22.91 | 14.44 | 7.26 | 12.20 |

# 1990 U.S. IMPORTS
# BY PRODUCT GROUPS

| PRODUCT TYPES | JANUARY 1990 | | FEBRUARY 1990 | | MARCH 1990 | | APRIL 1990 | |
|---|---|---|---|---|---|---|---|---|
| | Units | Value | Units | Value | Units | Value | Units | Value |
| Used & Rebuilt & Under $2,500 | 80,165 | 15,101,348 | 66,011 | 10,754,274 | 64,814 | 11,170,439 | 83,714 | 12,296,755 |
| Boring Machines | 40 | 2,511,474 | 57 | 2,665,242 | 41 | 2,141,056 | 47 | 1,821,173 |
| Drilling Machines | 187 | 5,976,518 | 66 | 1,331,591 | 131 | 4,767,643 | 113 | 3,595,961 |
| Gear Cutting Machines | 37 | 5,386,214 | 39 | 3,472,430 | 74 | 3,683,095 | 34 | 4,189,126 |
| Grinding Machines | 722 | 28,410,149 | 631 | 18,196,164 | 723 | 19,376,535 | 737 | 21,052,417 |
| Horizontal Lathes NC | 342 | 34,310,797 | 275 | 24,455,772 | 290 | 24,294,192 | 281 | 25,715,875 |
| Vertical Lathes NC | 23 | 2,826,480 | 9 | 1,890,507 | 10 | 1,702,771 | 6 | 1,455,000 |
| Lathes Non-NC | 609 | 9,691,329 | 474 | 8,086,596 | 812 | 10,071,175 | 976 | 10,109,253 |
| Milling Machines | 450 | 9,477,437 | 369 | 5,328,255 | 490 | 4,451,840 | 598 | 7,693,031 |
| Machining Centers | 368 | 44,495,101 | 262 | 28,896,262 | 270 | 30,976,925 | 344 | 48,979,703 |
| Station Type Machines | 16 | 4,428,004 | 9 | 2,400,678 | 15 | 3,697,896 | 41 | 8,192,567 |
| Other Metal Cutting | 543 | 14,026,009 | 390 | 15,984,088 | 381 | 15,326,449 | 425 | 12,556,824 |
| Punching & Shearing Machines | 110 | 5,701,791 | 122 | 5,391,216 | 203 | 8,518,187 | 146 | 3,941,347 |
| Bending & Forming Machines | 206 | 7,285,979 | 152 | 5,080,016 | 191 | 7,366,810 | 213 | 6,322,513 |
| Presses | 339 | 7,092,434 | 368 | 3,381,548 | 100 | 4,367,203 | 138 | 9,524,846 |
| Forging Machines | 82 | 8,532,715 | 121 | 5,829,041 | 104 | 5,559,426 | 69 | 3,905,455 |
| Other Metal Forming | 289 | 10,864,319 | 259 | 10,882,669 | 205 | 10,852,813 | 196 | 13,040,125 |
| TOTAL | 84,528 | 216,118,098 | 69,614 | 154,026,349 | 68,854 | 168,324,455 | 88,078 | 194,391,971 |

| PRODUCT TYPES | MAY 1990 | | JUNE 1990 | | JULY 1990 | | AUGUST 1990 | |
|---|---|---|---|---|---|---|---|---|
| | Units | Value | Units | Value | Units | Value | Units | Value |
| Used & Rebuilt & Under $2,500 | 81,467 | 13,702,955 | 85,374 | 12,270,934 | 76,189 | 13,858,003 | 69,939 | 13,198,803 |
| Boring Machines | 63 | 2,378,706 | 33 | 4,123,015 | 88 | 7,667,947 | 40 | 4,597,123 |
| Drilling Machines | 105 | 1,412,575 | 110 | 2,955,449 | 220 | 7,524,179 | 130 | 4,735,213 |
| Gear Cutting Machines | 60 | 1,682,253 | 14 | 2,742,090 | 28 | 3,959,955 | 54 | 7,485,351 |
| Grinding Machines | 761 | 22,855,644 | 751 | 21,054,909 | 780 | 38,441,928 | 821 | 31,832,312 |
| Horizontal Lathes NC | 246 | 26,717,053 | 257 | 26,221,605 | 306 | 27,483,344 | 274 | 30,277,624 |
| Vertical Lathes NC | 12 | 2,697,583 | 10 | 1,453,386 | 28 | 3,717,107 | 39 | 3,149,926 |
| Lathes Non-NC | 684 | 8,838,746 | 758 | 16,925,801 | 799 | 9,013,925 | 498 | 8,340,641 |
| Milling Machines | 498 | 6,400,652 | 481 | 7,074,128 | 558 | 9,880,698 | 348 | 7,789,763 |
| Machining Centers | 212 | 21,375,164 | 269 | 26,963,021 | 272 | 46,323,978 | 239 | 40,781,551 |
| Station Type Machines | 9 | 5,207,130 | 4 | 4,151,942 | 13 | 9,081,198 | 17 | 14,951,123 |
| Other Metal Cutting | 477 | 14,389,120 | 302 | 13,417,230 | 431 | 15,980,415 | 542 | 27,220,071 |
| Punching & Shearing Machines | 168 | 5,567,876 | 165 | 6,624,692 | 138 | 8,166,921 | 163 | 6,554,127 |
| Bending & Forming Machines | 245 | 7,810,331 | 181 | 8,443,572 | 162 | 6,083,506 | 216 | 15,096,724 |
| Presses | 410 | 4,231,697 | 74 | 14,834,727 | 281 | 6,834,799 | 902 | 21,031,332 |
| Forging Machines | 46 | 3,389,713 | 85 | 3,437,927 | 90 | 6,719,333 | 42 | 3,824,899 |
| Other Metal Forming | 198 | 11,187,287 | 186 | 10,134,241 | 297 | 11,238,578 | 227 | 13,026,763 |
| TOTAL | 85,661 | 159,844,485 | 89,054 | 182,828,669 | 80,680 | 231,975,814 | 74,491 | 253,893,346 |

# 1990 U.S. IMPORTS
# BY PRODUCT GROUPS

| PRODUCT TYPES | SEPTEMBER 1990 Units | SEPTEMBER 1990 Value | OCTOBER 1990 Units | OCTOBER 1990 Value | OCT'90 Y-T-D TOTALS Units | OCT'90 Y-T-D TOTALS Value | OCTOBER 1989 Units | OCTOBER 1989 Value |
|---|---|---|---|---|---|---|---|---|
| Used & Rebuilt & Under $2,500 | 78,484 | 11,149,478 | 123,375 | 18,144,453 | 809,532 | 131,647,442 | 95,522 | 14,140,579 |
| Boring Machines | 52 | 3,494,230 | 67 | 6,367,793 | 528 | 37,767,759 | 49 | 4,088,258 |
| Drilling Machines | 49 | 2,266,373 | 133 | 5,115,447 | 1,244 | 39,680,949 | 173 | 3,361,060 |
| Gear Cutting Machines | 69 | 4,625,890 | 24 | 9,163,879 | 433 | 46,390,283 | 74 | 1,105,796 |
| Grinding Machines | 616 | 25,521,740 | 728 | 22,115,629 | 7,270 | 248,857,427 | 638 | 19,102,185 |
| Horizontal Lathes NC | 194 | 20,111,149 | 236 | 24,077,544 | 2,701 | 263,664,955 | 337 | 30,842,516 |
| Vertical Lathes NC | 4 | 689,943 | 10 | 3,183,656 | 151 | 22,766,359 | 7 | 999,385 |
| Lathes Non-NC | 500 | 7,286,875 | 883 | 10,701,325 | 6,993 | 99,065,666 | 559 | 8,388,713 |
| Milling Machines | 363 | 7,383,527 | 368 | 6,724,436 | 4,523 | 72,203,767 | 612 | 11,233,029 |
| Machining Centers | 147 | 27,592,987 | 256 | 30,295,646 | 2,639 | 346,680,338 | 391 | 41,245,342 |
| Station Type Machines | 14 | 14,932,439 | 13 | 10,334,968 | 151 | 77,377,945 | 8 | 2,259,660 |
| Other Metal Cutting | 233 | 14,697,321 | 301 | 20,848,312 | 4,025 | 164,445,839 | 373 | 13,539,820 |
| Punching & Shearing Machines | 103 | 4,806,367 | 96 | 7,464,655 | 1,414 | 62,737,179 | 178 | 5,569,235 |
| Bending & Forming Machines | 161 | 5,831,579 | 140 | 9,706,668 | 1,867 | 79,027,698 | 168 | 6,669,577 |
| Presses | 416 | 10,399,978 | 225 | 5,254,258 | 3,253 | 86,952,822 | 205 | 7,367,625 |
| Forging Machines | 144 | 8,927,234 | 57 | 3,756,734 | 840 | 53,882,477 | 220 | 6,080,592 |
| Other Metal Forming | 204 | 10,822,213 | 259 | 16,246,525 | 2,320 | 118,295,533 | 1,322 | 7,845,154 |
| TOTAL | 81,753 | 180,539,323 | 127,171 | 209,501,928 | 849,884 | 1,951,444,438 | 100,836 | 183,838,526 |

| PRODUCT TYPES | OCT'89 Y-T-D TOTALS Units | OCT'89 Y-T-D TOTALS Value | % CHANGE SEP'90 - OCT'90 Units | % CHANGE SEP'90 - OCT'90 Value | % CHANGE OCT'89 - OCT'90 Units | % CHANGE OCT'89 - OCT'90 Value | % CHANGE YTD'89 - YTD'90 Units | % CHANGE YTD'89 - YTD'90 Value |
|---|---|---|---|---|---|---|---|---|
| Used & Rebuilt & Under $2,500 | 622,713 | 136,838,312 | 57.20 | 62.74 | 29.16 | 28.31 | 30.00 | -3.79 |
| Boring Machines | 693 | 50,350,890 | 28.85 | 82.24 | 36.73 | 55.76 | -23.81 | -24.99 |
| Drilling Machines | 1,587 | 66,350,009 | 171.43 | 125.71 | -23.12 | 52.20 | -21.61 | -40.19 |
| Gear Cutting Machines | 605 | 34,561,871 | -65.22 | 98.10 | -67.57 | 728.71 | -28.43 | 34.22 |
| Grinding Machines | 6,753 | 237,950,050 | 18.18 | -13.35 | 14.11 | 15.78 | 7.66 | 4.58 |
| Horizontal Lathes NC | 3,560 | 324,288,524 | 21.65 | 19.72 | -29.97 | -21.93 | -24.13 | -18.69 |
| Vertical Lathes NC | 127 | 20,173,444 | 150.00 | 361.44 | 42.86 | 218.56 | 18.90 | 12.85 |
| Lathes Non-NC | 4,547 | 73,450,608 | 76.60 | 46.86 | 57.96 | 27.57 | 53.79 | 34.87 |
| Milling Machines | 5,089 | 98,852,135 | 1.38 | -8.93 | -39.87 | -40.14 | -11.12 | -26.96 |
| Machining Centers | 3,165 | 344,945,931 | 74.15 | 9.79 | -34.53 | -26.55 | -16.62 | 0.50 |
| Station Type Machines | 172 | 51,814,542 | -7.14 | -30.79 | 62.50 | 357.37 | -12.21 | 49.34 |
| Other Metal Cutting | 4,139 | 155,665,943 | 29.18 | 41.85 | -19.30 | 53.98 | -2.75 | 5.64 |
| Punching & Shearing Machines | 1,523 | 63,977,924 | -6.80 | 55.31 | -46.07 | 34.03 | -7.16 | -1.94 |
| Bending & Forming Machines | 2,183 | 77,256,263 | -13.04 | 66.45 | -16.67 | 45.54 | -14.48 | 2.29 |
| Presses | 1,600 | 129,044,324 | -45.91 | -49.48 | 9.76 | -28.68 | 103.31 | -32.62 |
| Forging Machines | 1,409 | 73,120,934 | -60.42 | -57.92 | -74.09 | -38.22 | -40.38 | -26.31 |
| Other Metal Forming | 5,240 | 97,971,709 | 26.96 | 50.12 | -80.41 | 107.09 | -55.73 | 20.74 |
| TOTAL | 665,105 | 2,036,613,413 | 55.56 | 16.04 | 26.12 | 13.96 | 27.78 | -4.18 |